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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,026	10/31/2003	Kazuki Emori	SHO-0037	1078

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EXAMINER

KIM, ANDREW

ART UNIT

PAPER NUMBER

3714

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary	Application No. 10/697,026	Applicant(s) EMORI ET AL.	
	Examiner Andrew Kim	Art Unit 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4 and 6-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This office action is in response to the amendment filed on 11/29/06 in which:

- Claims 1, 3, 4, and 6 have been amended.
- Claims 2 and 5 have been canceled.
- Claims 9-17 have been added.
- Response to claims rejection have been filed.
- Claims 1, 3, 4, and 6-17 are pending.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).

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- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where

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elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

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granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 4, and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Uchiyama et al. (US 6,638,165).

Uchiyama discloses a gaming machine in which a virtual image is displayed in front of a plurality of reels. Uchiyama further discloses a light source behind the reels to illuminate a section of the reels to be noticeably visible to the player.

Claim 1: Uchiyama discloses

- a plurality of symbol strips each having a plurality of symbols (col. 6, lines 4-13);
- a plurality of annular bodies to which each of the symbol strips are annularly attached (col. 6, lines 4-13); It is inherent that the disclosed reel with symbols has a strip of symbols attached thereto.
- image display means provided in front of the plurality of annular bodies and configured to display an image concerning a game (col. 2, lines 14-40) ; and
- a light source configured to illuminate the symbols from behind the symbols (col. 6, lines 63-67),
- wherein the plurality of annular bodies are made transparent or semitransparent for transmitting light from the light source in a direction of the image display means. It is inherent for the reels to be transparent or semi transparent such that

the light behind the reels lights up the symbols. Otherwise, the light source would be pointless.

Claim 3: Uchiyama discloses

- a plurality of symbol strips each having a plurality of symbols (col. 6, lines 4-13);
- a plurality of annular bodies to which each of the symbol strips are annularly attached (col. 6, lines 4-13);
- image display means provided in front of the plurality of annular bodies and configured to display an image concerning a game (col. 2, lines 14-40); and
- a light source configured to illuminate the symbols from a slanting direction of a front of the symbols (fig. 5a, item 13, monitor),
- wherein the plurality of annular bodies are formed to reflect light from the light source in a direction of the image display means. It is inherent that the bodies reflect light.

Claim 4: Uchiyama discloses

- a plurality of annular bodies each having an outer ring part on which a plurality of symbols are placed, and an arm part joined to the outer ring part (col. 6, lines 4-13); It would be inherent that the disclosed reel of Uchiyama would have an arm part or equivalent to maintain the circumference of the reel. If the arm part or equivalent is missing, the reel would collapse on itself and would be inoperable.

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- image display means provided in front of the plurality of annular bodies and configured to display an image concerning a game (col. 2, lines 14-40); and
- a light source configured to illuminate the symbols from behind the symbols (col. 6, lines 63-67),
- wherein the outer ring part and the arm part of each of the annular bodies are formed in one piece, wherein at least a side margin of the outer ring part is made transparent or semitransparent for transmitting light from the light source in a direction of the image display means. It is inherent for the reels to be transparent or semi transparent such that the light behind the reels lights up the symbols. Otherwise, the light source would be pointless.

Claim 6: Uchiyama discloses

- a plurality of annular bodies each having an outer ring part on which a plurality of symbols are placed (col. 6, lines 4-13), and an arm part joined to the outer ring part; It would be inherent that the disclosed reel of Uchiyama would have an arm part or equivalent to maintain the circumference of the reel. If the arm part or equivalent is missing, the reel would collapse on itself and would be inoperable.
- image display means provided in front of the plurality of annular bodies and configured to display an image concerning a game (col. 2, lines 14-40); and
- a light source configured to illuminate the symbols from a slanting direction of a front of the symbols (fig. 5a, item 13, monitor),

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- wherein the outer ring part and the arm part of each of the annular bodies are formed in one piece, wherein at least a side margin of the outer ring part is formed to reflect light from the light source to diffuse in a direction of the image display means. It is inherent for the reels to be transparent or semi transparent such that the light behind the reels lights up the symbols. Otherwise, the light source would be pointless.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 3, 6, 7, and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchiyama et al. (US 6,638,165).

Claim 3: Uchiyama discloses

- a plurality of symbol strips each having a plurality of symbols (col. 6, lines 4-13);

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- a plurality of annular bodies to which each of the symbol strips are annularly attached (col. 6, lines 4-13);
- image display means provided in front of the plurality of annular bodies and configured to display an image concerning a game (col. 2, lines 14-40); and

Uchiyama does not explicitly disclose

- a light source configured to illuminate the symbols from a slanting direction of a front of the symbols,
- wherein the plurality of annular bodies are formed to reflect light from the light source in a direction of the image display means.

Instead, Uchiyama teaches a gaming machine that includes a light source configured to illuminate the symbols from behind the reels to allow the symbols to be noticeably visible to the player (col. 6, lines 63-67). It would have been an obvious matter of design choice to modify the light source to be in front of the reels wherein the plurality of reels to reflect light from the light source in a direction of the image display means since the Applicant has not disclosed that such an arrangement would offer any advantage over the configuration stated in claims 1 and 2 of the instant invention and appears that the gaming machine of Uchiyama would perform equally well with a light source behind the reels. Therefore, it would have been obvious design choice to one of ordinary skill in the art at the time of the invention to modify Uchiyama with a light source in front of the reels wherein the light is reflected in a direction of the image display means.

Claim 6: Uchiyama discloses

- a plurality of annular bodies each having an outer ring part on which a plurality of symbols are placed (col. 6, lines 4-13), and an arm part joined to the outer ring part; It would be inherent that the disclosed reel of Uchiyama would have an arm part or equivalent to maintain the circumference of the reel. If the arm part or equivalent is missing, the reel would collapse on itself and would be inoperable.
- image display means provided in front of the plurality of annular bodies and configured to display an image concerning a game (col. 2, lines 14-40); and

Uchiyama does not explicitly disclose

- a light source configured to illuminate the symbols from a slanting direction of a front of the symbols,
- wherein the outer ring part and the arm part of each of the annular bodies are formed in one piece, wherein at least a side margin of the outer ring part is formed to reflect light from the light source to diffuse in a direction of the image display means.

Instead, Uchiyama teaches a gaming machine that includes a light source configured to illuminate the symbols from behind the reels to allow the symbols to be noticeably visible to the player (col. 6, lines 63-67). It would have been an obvious matter of design choice to modify the light source to be in front of the reels wherein the plurality of reels to reflect light from the light source in a direction of the image display

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means since the Applicant has not disclosed that such an arrangement would offer any advantage over the configuration stated in claims 1 and 2 of the instant invention and appears that the gaming machine of Uchiyama would perform equally well with a light source behind the reels. Therefore, it would have been obvious design choice to one of ordinary skill in the art at the time of the invention to modify Uchiyama with a light source in front of the reels wherein the light is reflected in a direction of the image display means.

Claim 7: Uchiyama does not explicitly wherein the annular body is formed in white color. Instead, Uchiyama omits the color of the reel (col. 6, lines 4-13). However, it is notoriously well known in the art for the reels to be of a white color. One of ordinary skill in the art would have been motivated to provide white reels such that any designs or images displayed in front of the reels are more visible. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to modify Uchiyama with white reels to allow the player to easily see any designs or images displayed in front of the reels.

Claim 9: Uchiyama does not explicitly teach wherein the at least one light source is a plurality of light sources. Instead, Uchiyama discloses a light source within the reel (col. 6:63-67). One of ordinary skill in the art would have seen the benefit of modifying Uchiyama with multiple sources of light to make the indicia on the reels more visible and make the light source brighter. It would be obvious to make the light source brighter to provide players the ability to play the machine easier which increases casino profits.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to modify Uchiyama with a plurality of light sources to increase casino profits.

Claims 10 and 11: Uchiyama does not explicitly teach wherein the structure of the annular bodies are described. Instead, it would have been an obvious matter of design choice to have the annular bodies of Uchiyama built as described in claims 10 and 11 since the Applicant has not disclosed that such an arrangement would offer any advantage and appears that the gaming machine of Uchiyama would perform equally well with an annular body as recited in claims 10 and 11. Therefore, it would have been obvious design choice to one of ordinary skill in the art at the time of the invention to modify Uchiyama with each annular body with two rims and a indicia strip between the two rims.

Claims 12-15: Uchiyama does not explicitly teach wherein the monitor (13) is a liquid crystal display, however it would have been obvious to one of ordinary skill in the art to use a liquid crystal display because it is smaller and lighter than a CRT which enables the LCD machines to fit in smaller spaces, which provides a smaller gaming machine which in turn provides more floor space to fit more machines to increase casino profits. The light source whether it is from within or opposing the reels help illuminate the LCD in some way. It is inherent if the light source is activated that it will illuminate a portion of the LCD panel.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uchiyama et al. (US 6,638,165) in view of Sakai (US 2002/0173356).

Claim 8: Uchiyama discloses wherein the annular body is formed of polycarbonate. Instead, Uchiyama omits the material of the reel (col. 6, lines 4-13). However, in an analogous gaming machine reference, Sakai teaches the use of polycarbonate material that is transparent and flexible so as the light can be visible to the player from in front (Sakai, paragraph 48). One of ordinary skill in the art would have seen the benefit of modifying Uchiyama with polycarbonate reels as taught by Sakai to provide transparent and flexible material such that the light from behind the reels can be seen. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to modify Uchiyama with polycarbonate reels as taught by Sakai to provide transparent and flexible material such that the light from behind the reels can be seen.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchiyama et al. (US 6,638,165) in view of Ozaki et al. (US 2001/0031658).

Claims 16 and 17: Uchiyama fails to explicitly disclose a light source as described in the instant specification. Instead, Uchiyama discloses a light source within the reel housing as well as a monitor that may be used as a light source. In an analogous reference, Ozaki teaches a light source between an LCD panel and the reels (Ozaki, fig. 2) to provide back lighting for the LCD and to illuminate the reels. One of ordinary skill in the art would have seen the benefit of modifying Uchiyama as modified

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by Ozaki with two light sources between an LCD and the reels to further provide better backlighting for the LCD and to further illuminate the reels. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to modify Uchiyama with two light sources between the LCD panel and reels to provide better backlighting and illumination of the reels.

Response to Arguments

Applicant's arguments filed 11/29/06 have been fully considered but they are not persuasive.

Regarding claims 1 and 4 with respect to the Applicant's argument that Uchiyama does not anticipate at least one light source configured to illuminate the symbols from behind the symbols, the Examiner refers to col. 6, line 63-67 in which Uchiyama explicitly states that there is a light source housed in the mechanical reel portion that illuminates indicia.

Furthermore, in col. 11, line 7, Uchiyama anticipates using plastic as material, which can be transparent. Additionally, having a steel wheel does not necessarily indicate that the outer circumference is one solid sheet, which would not allow light to pass through. Instead, the steel may have two steel rims with a symbol strip between the two rims which is illuminated from within the wheel structure.

Regarding claims 3 and 6 with respect to the Applicant's argument that Uchiyama does not suggest a light source configured to illuminate the symbols from a

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slanting direction in front of the symbols, the Examiner refers to fig. 5A in which it is clear that an image display (13) is positioned diagonally from in front of the wheel (6). Furthermore, it is noted that the image display itself may be a source of light, similar to the light source housed in the wheel (6).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Kim whose telephone number is 571-272-1691. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bob Olszewski can be reached on 571-272-6788. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Scott E. Jones". The signature is fluid and cursive, with the first and last names being more prominent.

SCOTT JONES
PRIMARY EXAMINER

AK 2/5/2007